

## Significant BC food source might go under water

Fort St. John – April 9, 2010: The recently released *BC's Peace River Valley and Climate Change* report shows that with global climate changes, Peace River Valley agricultural lands have the unique potential to provide a significant, secure, local food source for BC residents. This valuable Agricultural Land Reserve land, paramount to Northern BC's local food security, is threatened to be flooded by the construction of the Site C hydroelectric dam.

In contrast to most of the province, the Peace River Valley's agricultural capacity is expected to be enhanced by climate change. Northeastern BC will benefit from warmer temperatures and more precipitation; average annual temperatures in the region are expected to increase 2-3°C, and frost-free days are expected to multiply.

The *BC's Peace River Valley and Climate Change* report explains:

- The unique agricultural lands of the Peace River Valley have an enormous potential to increase BC's food self-reliance... at least 42 vegetables can be commercially grown in the valley.
- Although a recent survey indicates that 91% of British Columbians feel it is important for BC to "produce enough food so [it doesn't] have to depend on imports from other places", BC continues to rely on imports for approximately 50% of its food supply.
- The Peace River Valley contains a substantial amount of exceptional agricultural land, especially on its lower terraces. Approximately 10% of the valley is classified as premium Class 1 agricultural land, accounting for the vast majority of Class 1 land in Northern BC. Approximately 50% of the valley is classified as Class 2 land. Much of this Class 2 land would have agricultural capabilities equivalent to Class 1 land if irrigated.
- The Peace River Valley's climate is among the best in Canada for agriculture. Less than 1% of Canada's total land base has the Class 1 climate of the Peace River Valley. The valley contains the only Class 1 climate in Northern BC.
- Approximately 5340 ha of the Peace River Valley's land would be flooded by Site C's reservoir, over 1000 ha of additional land would be impacted by the project's construction site and transmission line, and additional lands would be marginalized due to sloughing. At least 60% of the land which would be flooded by Site C's reservoir has an agricultural capability class rating of 1 and 2; and at least 74% has a rating of 1 to 3.

"BC Hydro has suppressed our top-notch agricultural resources in Northeastern BC by buying up land reserve and consequently killing off the market gardens that used to flourish in the valley," says Project Manager and Professional Biologist Brian Churchill. "The flooding from Site C would take these amazing fields off the map and put them under water. However, if Site C is stopped, once and for all, farmers could reinvest in vegetable crops, and BC residents would have a reliable local food source that actually grows with climate change."

The *BC's Peace River Valley and Climate Change* report is part of the broader *It's Our Valley* research and communication project about the Peace River Valley, funded by the Vancouver Foundation through partners West Moberly First Nations and the Peace Valley Environment Association. The project's purpose is to enable local stakeholders and decision-makers to make educated sustainable decisions for Peace River natural resources. The project's first report, *The Living Peace River Valley* (2009), highlighted the rich ecological, recreational, cultural and agricultural values of the valley.

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**FULL COPIES OF THE REPORTS are available for download: [www.itsourvalley.ca](http://www.itsourvalley.ca)**

**For more information:**

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**BACKGROUND and REPORT EXCERPTS ATTACHED**

# REPORT EXCERPTS

April 9, 2010

Feinstein, A. (2010). *BC's Peace River Valley and climate change: the role of the valley's forests and agricultural land in climate change mitigation and adaptation*. Chillborne Environmental.

“ **The vast amounts of carbon stored in the Peace River Valley's plants and soils contribute to the mitigation of global climate change.** The valley's lowland forests are expected to store approximately 500 tonnes of carbon per ha; an ecological service which has been valued by previous studies at approximately \$2000 per ha per year. The Peace River Valley's 4913 ha of lowland forest potentially destroyed by Site C store approximately 2.5 million tonnes of carbon, worth \$9.8 million per year.

**Site C will emit substantive greenhouse gases. The construction of Site C would also counteract the valley's contribution to global climate change mitigation.** The construction of Site C would flood approximately 5340 ha of land which currently helps mitigate global climate change through carbon sequestration and storage. BC Hydro's own estimate is that the proposed Site C project could have a net GHG impact (including both the lost carbon sequestration as well as the direct emissions from the reservoir) equivalent to the emission of approximately 147,000 tonnes of CO<sub>2</sub>/year, or the addition of 36,000 vehicles to the Lower Mainland.

**The unique biodiversity and habitat corridors of the Peace River Valley play a major role in facilitating the ability of the North American Rocky Mountain ecosystem to adapt to climate change.** Biodiversity and habitat connectivity are well known to be important in facilitating the adaptation of ecosystems to climate change, due to their contributions to ecosystem resistance, resilience, and long-term adaptation capabilities... The Peace River Valley has a high level of biodiversity, with over 300 wildlife species and over 400 vascular plant species. The construction of Site C would destroy approximately 4900 ha of the valley's forest resources, including much of the valley's highest quality habitat (e.g. old-growth forests, riparian forests, and wetlands). This would greatly decrease the valley's biodiversity and its function as an important habitat corridor; thus, significantly reducing the valley's contribution to climate change adaptation.

**As global climate changes, Peace River Valley agricultural resources have the unique potential to provide a significant, secure, local food source for BC residents.** While agriculture throughout much of BC and North America will likely experience serious adverse impacts from climate change, the Peace River Valley's agricultural potential is expected to reap some of the greatest benefits from climate change. It is very likely that climate change could help promote the establishment of a thriving vegetable industry in the Peace River Valley, which could help increase BC's food self-reliance and provide local food for the people of Northern BC. The construction of Site C would destroy the future potential of 21% of the valley's highest quality agricultural land (Class 1 and 2)... In addition, there is a significant potential that Site C's reservoir could cause local climatic changes which would adversely impact agriculture on the valley's remaining land.

**The cost of Site C's net GHG emissions resulting from the reservoir and loss of sequestering landscape substantively raise the true cost of the project.** The construction of Site C would severely limit the ability of the Peace River Valley to contribute to climate change mitigation (through the project's GHG impact) and adaptation (through the destruction of valuable ecosystems and agricultural land). In order to determine whether or not the construction of Site C is in the best interest of British Columbia, it is critical that an analysis of Site C's potential costs and benefits is as comprehensive as possible. Given the high level of scientific certainty regarding the substantial climatic changes which BC will experience throughout this century, it would be inexcusable to omit the influence of climate change from predictions of Site C's potential environmental and socio-economic impacts. When Site C is considered in the context of climate change, a number of very substantial costs are revealed. Unfortunately, these costs have been almost entirely ignored up to now, especially by BC Hydro.

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# BACKGROUND

April 9, 2010

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## **West Moberly First Nations**

West Moberly First Nations (WMFN) is a vibrant, engaged indigenous community headquartered at Moberly Lake in Northeastern BC. Moberly Lake is 125 km west of Fort St. John, British Columbia. An autonomous First Nation, WMFN strives to preserve its culture and lands while providing governance and services to its members. WMFN identified the Peace River Valley as a culturally critical bioregion. WMFN has made it a priority to preserve the environment and culture in the important Peace River Valley and is working with the PVEA and other local first nations to identify cultural and environmental values; and inform and educate both First Nation and non-aboriginal audiences about the best management of the valley.

## **Peace Valley Environment Association**

The Peace Valley Environment Association (PVEA) is a group of citizens concerned with protecting the natural and historic values of the valley. This diverse group of farmers, sportsmen, guide-outfitters and rural residents was formed to in 1975 in successful opposition to the BC Hydro proposal to dam the Peace River at a third location (Site C). 30 years later, the group is a strong and active protector of the valley, with members from urban, rural and First Nation communities. [www.peacevalley.ca](http://www.peacevalley.ca)

## **The Peace River**

Designated as a BC heritage river, the Peace River in Northeastern British Columbia has a deep cultural history of First Nations use, historic travel and homesteading activity. The valley is also one of British Columbia's richest biological areas, providing habitat for great and distinctive diversity and bounty of wildlife and birds and extensive Agricultural Land Reserve Lands. At the narrowest point of the Yellowstone to Yukon system, the Peace River Valley forms an essential connective link between the mountain park complexes to the south and the Muskwa-Kechika landscape to the north. The valley supports traditional First Nations use, farming and ranching, and provides recreational opportunities for Northern residents from nearby Fort St. John and Hudson's Hope. [www.itsourvalley.ca](http://www.itsourvalley.ca)

## **Paddle for the Peace**

The West Moberly First Nation and the Peace Valley Environment Association's original joint project, Paddle for the Peace, launches for the fifth year on July 10, 2010.

The WMFN and the PVEA organized the original Paddle for the Peace in 2006 to celebrate the Peace River Valley and demonstrate opposition to the proposed Site C hydroelectric dam. In 2009, 300 people paddled down the river in 146 boats, canoes and kayaks to show their support for the valley. 400 event participants were concerned about the loss of the valley's ecological, First Nation, traditional and agricultural values.

Media are welcome! For more information or to join the paddle, visit [www.paddleforthepeace.ca](http://www.paddleforthepeace.ca).